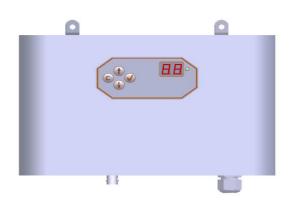
# **USER MANUAL**

AUTOMATIC DOSAGE 1 pump, 2 pumps, 3 pumps





FAMILY POOLS UP TO 100 m<sup>3</sup>





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Pool Technologies declares this equipment complies with the following E.U. directives:

- Electromagnetic Compatibility Directive 89/336/EEC modified 92/31/EEC and 93/68/EEC
- Low Voltage Directive 73/23/CEE modified 93/68/EEC

Chief Executive:

To improve product quality, the manufacturer reserves the right to modify production, at any time and without notice.

# I. SAFETY INSTRUCTIONS

\* READ AN FOLLOW ALL INSTRUCTIONS

\* SAVE ALL INSTRUCTIONS

In the manual this symbol indicates a WARNING.

It informs you of the risk of damage to the equipment or of serious injury.

It is very IMPORTANT that you pay attention to these warnings!

#### WARNING - RISK OF ELECTRIC SHOCK

The safety instructions outlined in this manual are not exhaustive. They highlight the most common risks of using electrical equipment in presence of water. Any installation and use of this equipment should be carried out with caution and common sense.



To prevent injury or accident install the equipment out of the reach of children.

Ensure that the installation conforms to the regulation in force in the region concerned. The filtration box power supply line should be protected by a differential circuit breaker with a release security of 30 mA maximum with an opening distance of at least 3 mm on all poles. This circuit breaker has nothing to do with the house's one- from 300 to 500 mA-. In case of doubt, get a qualified electrician to look at the installation. The electrical installation of this equipment should be performed by a qualified person in accordance with the regulation in force in the region concerned.

The power supply cables must be protected against accidental damage. A damaged cable should be replaced immediately and exclusively with an original cable. Never cut or extend the cables.

It is important to turn off the power supply before carrying out any technical work. Do not modify the device. Any modification may cause damage or be dangerous. Only qualified personnel should carry out maintenance in case of break down.

This device is intended for use in family pools only.

NON-OBSERVANCE OF THESE INSTRUCTIONS MAY CAUSE DAMAGE TO THE DEVICE OR SERIOUS INJURY

# II. PACKING LIST

Before starting installation, ensure that the box contains:

Type	Type	Туре
1 Pump	2 Pumps	3 Pumps
1 User manual	1 User manual	1 User manual
1 Controller	1 Controller	1 Controller
1 Peristaltic pump	2 Peristaltic pumps	3 Peristaltic pumps
N/A	1 pH probe	1 pH probe
5 m colored tubing	10 m tubing	15 m tubing
	5 m transparent tubing for pH	10 m transparent tubing for pH
	5 m colored tubing for	and algicide
	disinfectant	5 m colored tubing for
		disinfectant
1 inlet filter	2 inlet filters	3 inlet filters
N/A	1 probe holder	1 probe holder
1 Injection connector	2 Injection connectors	3 Injection connectors
2 inserts and 2 fixing screws	2 inserts and 2 fixing screws	2 inserts and 2 fixing screws
1 pipe collar diam 50 mm x ½ "	3 pipe collars diam 50 mm x ½''	4 pipe collars diam 50 mm x ½"

# III. INSTALLATION

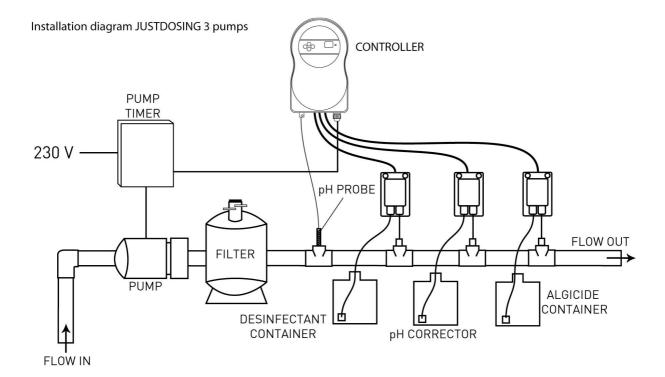
### A – INTRODUCTION

This manual covers the three automatic dosing models:

- Model 1 pump for the simple disinfection of the pool.
- Model 2 pumps for the disinfection and the pH regulation of the pool.
- Model 3 pumps for the disinfection, the pH regulation and the algaecide treatment of the pool.

Before proceeding with the installation of the device, it is very important to check the following points:

- ✓ The technical area should be dry and properly ventilated, protected from rain, splashes, discharges of water and UV radiation. Provide a space for the tank with the pH corrector which is a sufficient distance from the electrical appliances or any other chemical containing product.
  - Non-compliance with this instruction will lead to abnormal oxidation of the metallic parts, which may result in the device break down.
- ✓ Assembly of the dosing controller and its attachments must strictly conform to the following installation diagram.



# **B-INSTRUCTIONS**

# 1 - Controller

✓ Choose an area which is easily accessible, close to the electronic filtration box. Install the controller vertically, far enough away from the pool to respect the regulation distances of your own country. Do not cover it.



Any contact between the controller and the water in the pool may risk electrocution.

✓ The pH controller must be permanently connected to the filtration controller and slaved to the pump contactor. Do not use an extension cord with a plug or use a plug to connect the unit. Turn off the differential circuit breaker beforehand. Ensure that the controller switches off when the filtration pump stops.

#### 2 – Attachments

#### **Type 1 pump (disinfectant)**

✓ Place the pipe collar for the disinfectant injection on the pipe beside the pool, turning the opening 1/2 " preferably upwards. Mark, then drill the pipe. Mount the injection connector on to the pipe collar with Teflon.

- ✓ Connect the inlet filter to the pump with a part of the colored tubing supplied. Follow the direction of the arrows on the cover of the pump.
- ✓ Connect the outlet of the pH pump to the injection connector with a piece of the tubing supplied.
- ✓ Connect the pump to the controller.

# Type 2 pumps (disinfectant, pH)

- ✓ Place the first pipe collar in the middle of a horizontal pipe of a minimum of 40 cm. Turn the opening ½''upwards. Mark, then drill the pipe. Mount the probe holder on the pipe collar with Teflon.
- ✓ Take off the rubber protection from the pH probe then mount it on the probe holder. Ensure it is not stuck in the pipe.
- ✓ Connect the cable from the pH probe (BNC plug) to the bottom of the controller. Keep it away from all other electric cables to avoid any electromagnetic disturbance which may distort measurements.
- ✓ Place the second pipe collar at a minimum distance of 50 cm from the first. Adjust the opening preferably 1/2" upwards. Mark, then drill the pipe. Mount the injection connector ½ "joint with Teflon. Mount everything on the pipe collar. The injection connector should be as close as possible to water pushing in to the pool.
- ✓ Connect the suction strainer to the pH pump with a part of the tubing supplied. The arrow on the pH pump cover indicates the flow direction.
- ✓ Connect the outlet of the pH pump to the injection connector with a piece of the tubing supplied.
- ✓ Connect the pump to the controller.
- ✓ For the disinfectant, follow the instructions outlined for the type 1 pump using the colored tubing.

#### Type 3 pumps (disinfectant, pH, algaecide)

- ✓ For the disinfectant and pH, follow the instructions outlined for the type 2 pumps
- ✓ For the algaecide, follow the instructions outlined for the type 1 pump.

# IV. ACTIVATION

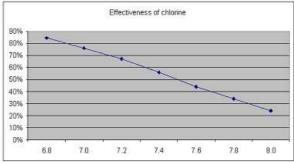
### A – INTRODUCTION

When installing the device for the first time or at the start of a new season, it is imperative to check and adjust the following 3 points:

- ✓ The pool water must be clear and free from algae or sediment.
- ✓ The water should be correctly balanced (alkalimetry, hydrometry):
  - Alkalimetry shows the level of bicarbonates dissolved in the water.
  - Hydrometry, shows the water hardness, that is the level of calcium or magnesium salts dissolved in the water.
- $\checkmark$  The pH of water should be stabilised between 7,0 and 7,2.



The efficiency of a chlorine chemical treatment is rapidly decreased by the increase in pH and scale precipitates more quickly when pH is high or unstable.



Source: French Ministry of Health

### **B-INSTRUCTIONS**

Model 2 and 3 pumps: the pH probe has been calibrated in the factory; no calibration needs to be carried out to regulate pH before first using it.

All models: it is necessary to adjust the dose of the disinfectant and/or algaecide according to the instructions of paragraph V.

The activation of your device is now completed. We recommend you to activate your guarantee on <a href="www.pool-technologie.com">www.pool-technologie.com</a>. It will enable you to receive information on your device.

# V. MAINTENANCE

Never use hydrochloric acid. Only use a pH corrector product (acid or base) which is recommended by your professional. The use of any other chemical product can lead to irreversible damage to the device.

It is IMPERATIVE to check the levels of chlorine and pH each week with your usual analysis kit. An excessive level of chlorine and/or a low pH is likely to cause oxidation of the metal parts and can lead to non-reversible deterioration of the pool surface, axes and automatic shutter flaps, telescopic shelters, thermal exchangers. If you are covering the pool (shutter, tarpaulin, cover), ventilate the pool regularly so as to avoid dissolved gases accumulating which could disrupt the measurements of pH or chlorine probes. The manufacturer is not liable for the non-observance of the maintenance instructions.

Your device allows you to carry out different operations detailed below. Button C allows to you stop an operation which is running, at any time, so you can go back to the main menu.

#### A – INTRODUCTION

Depending on the model (1, 2 or 3 pumps), the device may have the following functions: disinfection / pH / algaecide.

Select a function with the buttons  $\mathbf{O}$   $\mathbf{O}$ . To make it easier, the display shows differently according to the functions:

- Single flash : pH function displayed

- Double flash: disinfectant function displayed

- Triple flash: algaecide function displayed

For each of these functions, the following table shows the parameters which can be modified by the user:

<b>Functions</b>	Parameters which can be modified	Codes
Algaecide	Manual injection / dose in ml/upon each	MA / do
	start-up.	
Disinfectant	Manual injection/ dose in ml/hour	MA / do
pН	Manual injection, pool volume, pH probe	MA / SE / CP / Ad /
	adjustment, probe calibration, pH corrector.	CA / Co

# **B – INSTRUCTIONS**

To modify the parameters of a function:

- $\checkmark$  Choose the function using the  $\mathbf{0}$   $\mathbf{0}$  buttons.
- $\checkmark$  Then hold the button V for 3 secs to access the parameters which can be modified.
- $\checkmark$  Choose the code of the parameter to modify using the  $\bigcirc$  buttons then confirm with V.
- ✓ The parameter to modify flashes.
- $\checkmark$  Choose the desired value using the  $\bullet$  buttons then confirm with V.
- ✓ The value will flash for 3 secs. The device then automatically returns to the default function.

Button C allows you to stop the operation in progress at any time and return to the main menu.

#### <u>1 – Start / Stop</u>

This function allows you to stop or start the device again at any time.

✓ Press and hold **C** for 3 seconds.

#### 2) <u>Disinfection or Algaecide</u>

Injection of disinfectant takes place every hour according at the dose which the user has set (see the disinfectant product user advice to determine the necessary hourly dose).

Injection of algaecide occurs each time the device is started in a dose which the user has set (see the disinfectant product user advice to determine the necessary daily dose).

#### a) – Manual injection

This function allows you to carry out manual injection of disinfectant or algaecide for an adjustable amount of time.

- ✓ Select the function you want then press button V for 3 seconds. MA flashes in the display.
- ✓ Select the **MA** parameter and confirm with **V**.
- ✓ **01 is displayed by default** (or the last saved value in ml).
- ✓ Select the dose from 0 to 990 ml using the **① U** buttons then confirm with V. Attention, a display of **15**. means 150 ml.
- ✓ Injection starts. When it is finished, after 3secs the device automatically goes into regulation mode.

#### b) – Regulating the dose

- ✓ Select the desired function then press button V for 3 seconds. MA flashes in the display.
- $\checkmark$  Select the **do** parameter and confirm with **V**.
- ✓ 00 is displayed as default (or the last saved value in ml)
- ✓ Select the dose from 0 to 990 ml using the **① U** buttons then confirm with V. Attention, a display of **15** means 150 ml.
- ✓ After 3 secs the device automatically goes to the main menu.

#### 3) pH regulation

#### a) – Manual injection

This function allows you to carry out manual injection of a corrector product for an adjustable amount of time.

- ✓ Select pH regulation function then press button V for 3 seconds. MA flashes in the display.
- ✓ Select the **MA** parameter and confirm with **V**.

- ✓ 60 flashes by default (or the value saved in s)
- $\checkmark$  Select the time desired with the  $\bullet$  buttons (from 0 to 9.5 mins) then confirm with V.
- ✓ Injection starts. **Important**: over 60 s, the read out is in minutes and seconds. "1,1" means 1 minute and 10 seconds
- ✓ After 3secs the device automatically goes to the main menu.

### b) – Adjusting the pH probe

This function allows the display to show the pH value you have measured in your pool with your usual analysis kit.

- ✓ Press button V for 3 seconds . Ma starts to flash.
- $\checkmark$  Choose function **Ad** using the **O U** buttons then confirm with **V**.
- $\checkmark$  The display flashes the value 7.0.
- ✓ **Select** the desired value using the **① ②** buttons then confirm with **V**. If the selected value is acceptable, then the display shows **②** during 3 s. The new value is then saved.
- ✓ After 3 secs the device automatically goes to regulatory mode.

In case of failure in adjusting the pH probe:

- ✓ The display shows Er for Error. Push the button ON/OFF or V to erase the message.
- ✓ The previous value is kept.
- ✓ Calibrate the probe.

### c) – Calibrating the pH probe

Each pH probe has its own characteristics. To regulate pH satisfactorily, it is recommended that a calibration pH probe be made at the start of the season and after any change to the pH probe.

- ✓ Check that you have pH7 and pH10 solutions (not supplied).
- ✓ Stop filtration. Remove the probe from its holder and replace it with a coin. Then set filtration to MANUAL mode.
- ✓ Hold down the **V** button for 3 seconds. **MA** flashes.
- $\checkmark$  Choose function **CA** using the **O U** buttons then confirm with **V**.
- $\checkmark$  The display shows the 1<sup>st</sup> point of calibration by flashing 7.
- ✓ Place the pH probe in a standard pH 7 solution then confirm by V.
- ✓ Please wait. Calibration is automatic: the display will flash alternatively 7 and - . If the measured value is correct, the display will read **Oh**.
- ✓ Rinse the pH probe then let it drain. After 3 s, the display will then show the 2nd calibration point by flashing 10.
- $\checkmark$  Place the pH probe in the pH 10 solution then confirm with V.
- ✓ Please wait. Calibration is automatic: the display will flash alternately 10 and - . If the measured value is acceptable, the display will read **Oh for** 3 s. The new parameters are then stored.
- ✓ The device will automatically move into regulation mode after 3 secs. Stop the filtration.
- ✓ Put the probe back into its holder then put filtration to « AUTO » mode.

If the calibration does not work:

- ✓ The display reads **Er for** Error. Pressing Stop/Start or **V** will clear the message.
- ✓ The previous parameters will be stored.
- ✓ Contact a professional. You may need to replace your pH probe.

The calibration solutions are disposable. They can be kept for 1 year in their vacuum sealed packet stored away from light and heat. Dispose after use.

Never dry the pH probe with a cloth or absorbent paper since it may damage it. Leave it to drip dry.

#### d) - Regulating the pool volume

This function allows you to adapt the quantity of corrective product injected to the volume of the pool. The volume by default corresponds to pools from 30 to 35 m<sup>3</sup> (code 15).

- > Press the V button for 3 seconds : MA flashes.
- > Choose **CP** using the **O U** buttons then confirm with **V**.
- The display flashes and shows the default value (code 15) when first installed.
- $\triangleright$  Choose the code which corresponds to the volume of the pool using the  $\bullet$  **U** buttons then confirm with  $\bullet$ .
- > The display stops flashing. After 3s the device automatically goes to regulatory mode.

Pool volume	code	Pool volume	code	Pool volume	code
$0 \text{ m}^3 \text{ to } 1 \text{ m}^3$	01	$10 \text{ m}^3 \text{ to } 15 \text{ m}^3$	11	$60 \text{ m}^3 \text{ to } 70 \text{ m}^3$	21
$1 \text{ m}^3 \text{ to } 2 \text{ m}^3$	02	$15 \text{ m}^3 \text{ to } 20 \text{ m}^3$	12	$70 \text{ m}^3 \text{ to } 80 \text{ m}^3$	22
$2 \text{ m}^3 \text{ to } 3 \text{ m}^3$	03	$20 \text{ m}^3 \text{ to } 25 \text{ m}^3$	13	$80 \text{ m}^3 \text{ to } 90 \text{ m}^3$	23
$3 \text{ m}^3 \text{ to } 4 \text{ m}^3$	04	$25 \text{ m}^3 \text{ to } 30 \text{ m}^3$	14	$90 \text{ m}^3 \text{ to} 100 \text{m}^3$	24
$4 \text{ m}^3 \text{ to } 5 \text{ m}^3$	05	$30 \text{ m}^3 \text{ to } 35 \text{ m}^3$	15	$100 \text{ m}^3 \text{ to } 110 \text{m}^3$	25
$5 \text{ m}^3 \text{ to } 6 \text{ m}^3$	06	$35 \text{ m}^3 \text{ to } 40 \text{ m}^3$	16	$110 \text{ m}^3 \text{ to } 120 \text{ m}^3$	26
$6 \text{ m}^3 \text{ to } 7 \text{ m}^3$	07	$40 \text{ m}^3 \text{ to } 45 \text{ m}^3$	17	$120 \text{ m}^3 \text{ to } 130 \text{ m}^3$	27
$7 \text{ m}^3 \text{ to } 8 \text{ m}^3$	08	$45 \text{ m}^3 \text{ to } 50 \text{ m}^3$	18	$130 \text{ m}^3 \text{ to } 140 \text{ m}^3$	28
$8 \text{ m}^3 \text{ to } 9 \text{ m}^3$	09	$50 \text{ m}^3 \text{ to } 55 \text{ m}^3$	19	$140 \text{ m}^3 \text{ to } 150 \text{ m}^3$	29
$9 \text{ m}^3 \text{ to } 10 \text{ m}^3$	10	$55 \text{ m}^3 \text{ to } 60 \text{ m}^3$	20	$150 \text{ m}^3 \text{ to } 160 \text{ m}^3$	30

Each code represents the injection time for the pH corrector product. Due to the nature of water it may be necessary to adapt the timing to the pre selected method.

#### e) Choosing the pH corrector:

The device has a default setting for using an acid corrector product. It may be necessary to modify this regulation (acid / base) adapt it to the characteristics of the water in your pool.

- ✓ Press button V for 3 seconds : MA flashes in the display.
- $\checkmark$  Select the function **Co with the**  $\bigcirc$  **U** buttons then confirm with **V**.
- $\checkmark$  Select by  $\bullet$  u an acid product (AC) or base (bA) then confirm with V.

The display stops flashing and after 3s the device automatically goes to regulation mode.

### f) Regulating pH

The pH of the water in the pool is by default automatically regulated around 7.2. It is however possible to modify this point de consigne to adapter it to the characteristics of the water in your pool.

- ✓ Press the V button for 3 seconds. MA flashes in the display.
- $\checkmark$  Choose the SE function with the  $\bigcirc$  U buttons then confirm with V.
- ✓ The display flashes with the stored details.
- $\checkmark$  Choose the value you want with  $\bullet$  within 6.8 to 7.6 then confirm with  $\mathbf{V}$ .

# VII. ALARMS

## 1– Flashing pH display

The device has detected a value of pH > 1 (Alarm pH high) or pH < 1 (Alarm pH low). Check the value of the pH in the pool using your usual analysis kit. If the pH abnormal, stop the device. Add a pH acid corrector (Alarm pH high) or pH base (Alarm pH low) to the pool

the device. Add a pH acid corrector (Alarm pH high) or pH base (Alarm pH low) to the pool through the refoulement pipes. Restart the device. If the pH is normal, adjust or calibrate the pH probe.

#### 2–Flashing AL display

The device has detected that the previous attempts to correct pH. have not been successful

- ✓ Check that the pH corrector tank is not empty
- ✓ Check that the pH pump is injecting properly (cf. paragraph V.2)
- ✓ Check the pH probe comparing the value indicated by the device with the pH measured in the pool with your usual analysis kit
- ✓ Check the condition of the extraction and injection valves
- ✓ Check the volume of the pool (refer to paragraph V.5)
- ✓ Do not hesitate to visit our FAQ on <a href="www.pool-technologie.com">www.pool-technologie.com</a>. If you do not find solution to your problem, contact our Technical Assistance Service on:
- N° INDIGO 0 892 705 520 (from France)

#### Please supply:

- ✓ Proof of purchase
- ✓ Serial number of the controller and the pH probe
- ✓ Date when the device was installed
- ✓ Name of the professional shop where it was purchased and/or who installed the equipment

pH, chlorine level, water temperature, stabiliser level, pool volume, time of daily filtration

# VIII. WINTERING

When wintering the pool (emptying the pool and/or stopping filtration), carry out the following maintenance operations:

- ✓ Remove the pH probe and keep it in the rubber protection or filled with tap water.
- ✓ Rinse the flexible tube of the peristaltic pump with clean water.

#### Changing the pump tubing:

Replace the flexible tubing from the peristaltic pump each season, the check valves. The maintenance kit (Réf. KIT02MAINMTP) contains all of the parts necessary for annual maintenance operation.

# IX. WARRANTY

All our care and technical expertise has gone into making this device. It has undergone quality control. If, in spite of all care and knowledge which has gone in to its manufacture, you have to use our warranty, free replacement only applies to parts of our equipment which are defective.

# **Duration of the warranty**

2 YEARS for New material (controller).

**1 YEAR** for the pH probe (basic probe excluded)

1 Month\* for After Sales Repairs and spare parts

## Warranty objects

The warranty applies to all parts with the exception of consumables which must be replaced regularly.

The device is covered for any manufacturing defect only when it has been used normally in a family pool. Use in public pools voids the warranty.

### After sales service

- ✓ All repairs are done in our work-shop.
  - All transport fees are payable by the user. There will be no compensation for immobilisation and privation of the equipment when it is being repaired.
- ✓ In any case, the equipment is always carried at the user's own risk. It is up to the latter to check that it is in perfect condition before the order is collected and if need be to state any reservations on the carrier's slip. Confirm this with the carrier within 72 hours by registered letter, with an acknowledgement of receipt.

# IMPORTANT: A replacement under guarantee will on no account extend the initial warranty.

#### Limit of the warranty

### *Not included in the warranty:*

- 1. Equipment and labour provided by a third party at the time of the installation of the equipment.
- 2. Damage caused by an installation which is non-compliant.
- 3. Problems caused by deterioration, accident, harsh treatment, professional negligence or by the final user, non-authorised repairs, fire, floods, lightening, frost, armed conflict or any other force majeure.

ATTENTION: The warranty does not cover any damaged equipment further to non respect of security use rules, use and maintenance stated in the current manual.

Every year we improve our products and software. These new versions are compatible with previous models. New versions of equipment and software are not added to the warranty from the previous models.

<sup>\*</sup> Authentic invoice date.

### **Implementation of the warranty**

- ✓ For more information on the current warranty contact your professional or our After Sales Service. Any request should be accompanied by a copy of your proof f purchase
- ✓ Do not hesitate to activate your guarantee on <a href="www.pool-technologie.com">www.pool-technologie.com</a>. It will enable you to receive information on your device.
- ✓ No part replacement will be made without the defective part being returned beforehand. Any part which is not returned will be charged at the current tariff.

# Laws and disputes

✓ The present warranty is subject to French law and all other European directives or international treaties which are in force at the moment of complaint and which are applicable in France. In the event of dispute with regard to its interpretation or its execution, this is the remit of TGI de Montpellier.

# IX. ENVIRONMENT PRESERVATION

Environment preservation is essential. Our company is very much involved in this.

Our products are designed and manufactured with materials and components which are of a high quality, respect the environment, and are reusable and recyclable. However, the different components of which they consist may not be biodegradable. Our products should not just be discarded.

European environmental directives set, for each product category, appropriate methods of managing and disposing of waste material. The aim is to reduce waste material and to use it, avoid making their components become a danger and to encourage the products to be reused. To carry out this policy successfully, product manufacturers, distributors, users and even professionals are involved in managing waste material from these products.

Since August 13 2005, a European directive means you can dispose of your used product free of charge:

- If you buy a new product which is more or less the same, you can bring it back to the distributor when you are buying a new one.
- Take it to a waste recycling facility.



The symbol stamped on a product means that a selective collection is necessary and that it must be sorted from other household waste.

Manufactured by:
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